The answer to the puzzle of the Graces and Muses necessitate that each of the three Graces had 144 apples, and every one of the nine Muses 48 flowers. Then let each of the Graces give a dozen apples to every Muse, and let every Muse give 4 flowers, one of each hue, to each of the Graces, and it will be found that every Grace and Muse has three dozen apples and three dozen flowers, and that the flowers being nine of each color, their stores are all just alike.

This feature of the problem is not a catch, but was evidently intended as that part of the mystery which interested Euclid and Archimedes, and which has made the legend so famous.

THE COURIER AND ARMY.

Following the rule for solving puzzles of this kind, which is to multiply the length of the army by its length; then divide by 2 and the square root multiplied by 2 and added to the length of army will give the answer, we find that the courier travels a little over 120 miles.

In the second proposition the courier would have to travel a little over 200 miles.

THE COIN PUZZLE shows the first boy got a 50-cent piece, the next two 2-cent pieces, and the last a 2-cent piece and 2 cents.

ANSWER TO INVESTMENT PUZZLE. One-fourth of Mrs. Smith's money, or one-third of her husband's, or one-seventh of their combined funds would buy that shady grove and babbling brook. The other six-sevenths comes to $5,000, so that one-seventh, the price of the grove, must have been $833.33.

ANSWER TO APPLE PUZZLE.

After writing out the various ways in which the apples might have been distributed among the boys, based upon the numbers their sisters had received, it will be found that but one combination will work out the required total of 32 apples.
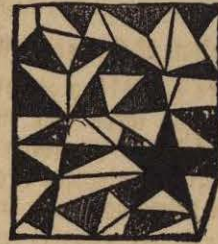
Ann Jones and her brother Bill received together 4 apples; May Robinson and her brother Jack received 10; Jane Smith and brother Ned were given 6, while Kate Brown and brother Tom got 17.

WILLIAM TELL shot two No. 11s and six No. 13s. The shadow of the net stake where William stands is just half as long as the stake, and as shadows show the same ratio at the same hour, that 35-yard shadow would prove the pole to be 310 feet high.

WHITTINGTON'S CAT went from A to 4—C—I—Y—2 B—6X3 and Z.

It took six seconds to strike six; so the intervals were one and one-fifth seconds; therefore eleven times One and a fifth would be thirteen and one-fifth seconds.

THE LOST STAR was found here:

This the way the elephant ran!

COMING TO TOWN Aunt Cynthia tells me that they started out with $29, and that Reuben paid $8.50 for his suit and $6.50 for his hat. She gave $8.50 for a hat and $5.50 for a dress. Therefore if Reuben had bought a $6 hat and she a $9 hat, her's would have cost half as much more than this, and they would each have spent $14.50.

THE ODDS AND EVENS puzzle is solved by the man on the fence taking an old-fashioned $5 gold piece and giving each boy a 2s and a 5 cent piece.

ANSWER TO ANNUITY PUZZLE. The three daughters together received $35 per annum. The first year, Phoebe, the eldest, was ten years of age, Martha, eight, and Mary Ann two. They received respectively $17.50, $14 and $3.50. Five years later, when the sixth payment was due, their combined ages amounted to thirty-five. Phoebe received $15, which was one-seventh less than she first received. Martha received $13, being one dollar less than her first payment, while Mary Ann got 7—or double her first share.

The first whist problem is solved by South leading diamond 3, to which North discards spade ace, after which it is plain sailing. In the second problem South leads heart 7 and North discards diamond ace. South leads spade 6. North takes and leads club 2, etc., etc.

In the Billiard Problem, hit the nearest cushion fourteen inches from the end rail.

The Chess Problem is solved by K. to Kt. 3.

Byron's Enigma was the letter I.

ANSWER TO REAPER'S PROBLEM. In that problem of the three reapers, Ben could have done the work in 12 and 12-29 days, and Bill would have required 48 days, while if they both worked together they could complete it in 9 and 63-73 days. Jake, who could do the job in 9 days, is evidently worth ten shillings per day, so he gets 50 shillings for the five days. Ben, who should have received 40 shillings and 3 shillings and 9 pence less, as that was given to Bill, which establishes his rating, so that it would take him 48 days to earn 90 shillings.

OLD STYLE REBUS: Time and Tide wait for no man.

In that square word puzzle each word can be spelled four ways. In the little girl's magic square she placed a figure 4 in each corner and an 8 in each of the other five, so that 16 can be added ten ways.

ANSWER TO CHARITY PUZZLE. This problem is readily solved by the clever puzzle method of working backwards. If she had 1 cent left after giving 3 cents more than half of the remainder, then it is clear that she must have had 8 cents prior to making her last donation. To the second applicant she gave 2 cents more than half of what she had left—after which she had 3 cents. Therefore, when she met the second beggar she must have had 20 cents. When she encountered the first of her aplicants to whom she gave 1 cent more than half of her money —leaving 20 cents—she must have had 42 cents.

SOLUTION TO JACK SPRATT PUZZLE. It is safe to assume that Jack will not trouble the fat so long as there is any lean left, and that Mrs. Spratt will take a like course with reference to the lean. Now, Jack's capacity for lean is ½ minus 1-40, or 1-10 of a barrel per week, so that he can eat the lean half of the barrel in five weeks. In the same time Mrs. Spratt will eat 7-12 less 1-6 of 5-12 of a barrel of fat. At the end of five weeks, therefore, there will be left just 1-12 of a barrel of fat, which will suffice Mr. and Mrs. Spratt for five days. Therefore, they will require just forty days to clean up the barrel of half lean and half fat pork.

ANSWER TO TANDEM PUZZLE. Herman contributed three-quarters of the speed for the first third, or one-quarter of the motive power required for the entire journey. Then he gave one-third of the necessary energy for the next quarter, or one-twelfth of the total. Thus for the seven-twelfths of the journey he gave four-twelfths of the energy required for the entire trip. In going the reminling five-twelfths of the way Herman must supply two-fifths of the power or one-sixth of the whole, which, together with his contributions of one-quarter and one-twelfth, makes up one-half.

ANSWER TO PEANUT PUZZLE. There were 1,021 peanuts. The first boy received 228, then a girl 192, then 144 to the next boy and 60 to the little tot 108, which left Aunt Mary 321.
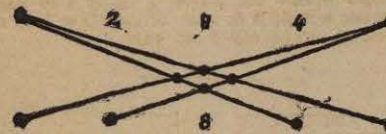
Catch the Christmas turkey in 13 plays by moving them from 38 to 36. In the puzzle take the turkey in the following 24 moves: 8, 53, 14, 13, 8, 9, 15, 13, 10, 11, 43, 39, 31, 33, 25, 22, 45, 50, 4, 5, 69, 60, 2, 3, 7.

Accidental burials conceal the following words: 1. Stag. 2. Sow, toad. 3. Seal, sea lion, hare. 4. Rhone, Po, cow, ass, rat. 5. Hen, hen. 6. Ass. 7. Shad. 8. Cat. 9. Rat. 10. Hen. 11. Asp, reading, emu. 12. Flee, emu. 13. Ass, moth, fish. 14. Lion, hind, Dan. 15. Ant, ant. 16. Ant, hens, hare, ant, roe, cow, cot, man, tar, dam, doe, rat. 12. Flee, emu. 13. Ass, moth, firsh. 14.

SOLUTION TO AUTOMOBILE PUZZLE. The average speed for the first two hours was 67¼ miles per hour, for the last two hours, 52 miles. Difference, 15¼ miles in two hours or 7¾ miles in one hour. Hence the distance accomplished in the first hour was 71¾ miles, in the second 63⅝, in the third 55⅞, and in the fourth 48¼ miles.

ANSWER TO A NAUTICAL PUZZLE

Concerning Guggelheim's two turkeys, which together weighed twenty pounds, it can be proved that the larger bird weighed 16 pounds and the smaller 4 pounds.

The bookworm turns upon the fact that, as the books stand on the shelf, the bookworm has to bore through two covers only, so it requires but two hours.

Thrice behead the word Nascent and it becomes ascent, scent and cent.

The spinster's age, plus one-half and one-third of her age, plus nine years, equals 70 years, according to her reply to the census taker. Therefore, eleven-sixths of her age is equal to 61 years, and her age must be 33 3-11 years.

In the workshop problem the paper-hanger charged $200, the painter $900, plumber $800, electrician $300, carpenter $3,000, and the mason $2,300.

If there are sixteen players in the lawn tennis contest and the winner must then play with the last year's champion for the new championship, the chances are 31 to 1 against any one of the first players winning from the old champion.

Pat's answer to the volcano riddles was that the man was trying to get to the mouth of the crater.

THE REAL ESTATE PUZZLE.

At the request of many correspondents, I will give a simple, common sense method of getting at the correct answer, which differs from the way others tackled it. According to the puzzle method of working backward, I should analyze it from the last payment by saying that final $1,000 is 105 per cent of what sum of money? Dividing $1,000 by 105 shows that $952.3809 with 5 per cent interest would be the amount of the last payment. Going backward again to the previous payment we ask, what sum must $1,952.3809 have been 105 per cent of? Divide again by 105, and we get $1,859.4103. Add the other payment of $1,000 and we get $2,723.2479 as the previous amount. Add $1,000 to make it $3,723.2479, and another division carries it back to $3,545.9503. Add $1,000 once more and another division will give $4,329.4764 as the balance to bear interest, after the first $1,000 payment, so $5,329.4764 was the actual value received for the property, because that sum drawing interest at 5 per cent would just meet the six $1,000 payments, according to agreement.

ANSWER TO PEDDLER'S PUZZLE.

The old lady who bought some shoe-strings, four times as many papers of pins and eight times as many handkerchiefs, paying as many pennies for each article as she bought number of that article, and expending $3.24, must have purchased two shoe-strings, eight papers of pins and sixteen handkerchiefs.

Solution of Games of the East.

There are 216 possible variation in the way three dice may fall, of which 42 foot up seven or eleven. Therefore the chances are 42 out of 216 in throwing seven or eleven.

ANSWER TO INSTALMENT PUZZLE.

As the terms of the furniture purchase call for a cash payment of $5 to begin with, the buyer thus has to decide between an additional $60 cash payment or fourteen installments of $5 each, so let us see how long she has the use of the money. She has $60 for one month, $55 for the next, $50 for the next, $45 for the next, then $40, $35, $30, $25, $20, $15, $10, and $5, making in all $390 for one month, for the use of which she pays $10, which would be at the rate of $120 a year, which is paying 30.769+ per cent. interest.

The remnant puzzle cut is as follows:

The diamond cuts as follows:

In the race between the hare and the tortoise the length of the track makes no difference. The tortoise has one-eighth start, and has run 4.25 times as fast as the hare up to the time they meet, and as the hare has five-sixths yet to run 5x4.25 equals 21.25 as fast as he went before, but as the question said how much faster, and 20.25 faster is equal to 21.25 as fast, we will say that the answer should be 20.25 plus faster to win. It being clear that 20.25 would only tie the race, he must go a little over to win.

PICTURE SUMS.

Hornet minus Net plus Seal plus Arm plus Clock minus Alarm Clock equals—HORSE.

SIMPLE REPETITIONS.

The following words, when placed in the blank spaces, complete the sentences: Painted, cowslips, hasten, useless, feather and sallying.

A CHAPTER OF ACCIDENTS.

The blank spaces are filled by the following words in their given order: Nat, sat, bat, hat, cat, mat, rat, eat, vat, fat, Pat, I, at.

A FISHING EXCURSION.

The names of the fish are: 1. Star, 3. Carp, 4. Pike, 5. Dog, 6. Cat, 7. Globe, 8. Dab, 9. Torpedo, 10. Sword, 11. Ray, 12. Sole, 13. Cod, 14. Bass, 15. Sturgeon, 16. Gold, 17. Sun, 18. Skate, 19. Perch, 20. Blue.

REMOVING A LETTER.

SCREAM is the word from which the first letter may be removed to produce a country product, again behead it, it leaves a quantity of paper.

SHAKESPEARE REBUS PUZZLE. "WHAT'S IN A NAME." PERPLEXED PROFESSOR.

If five times six is 33—ten would naturally be 1-3 of what 30 would be, viz: 11.

REBUS PUZZLES.

The Soldier wrote to his Sweetheart: "I cannot bear to leave you" and she replied "All's well that ends well."

DOUBLE BEHEADINGS AND CURTAILMENTS.

1 Stable, 2 Stone, 3 Switch, 4 Swear, 5 Stare, 6 Trace, 7 Trail, 8 Twin, 9 Wheat, 10 About, 11 Brink, 12 Chair, 13 Chill, 14 Snail, 15 Frank, 16 Shears, 17 Price, 18 Plate, 19 Place, 20 Start, 21 Strain, 22 Steam, 23 Spending, 24 Agate, 25 Preach.

CATTLE PUZZLE.

Farmer Jones originally paid $150 for one cow and $50 for the other. In selling he made 10% on one and lost 10% on the other, receiving $210, or a gain of 5% on the transaction.

REBUS PUZZLE.

The Poet said "I think some wonderful thoughts" and the editor replied "You think you think."

GEOGRAPHICAL DROP-LETTER PUZZLES.

1 Nashville-Ashville; 2 Croton-Croon; 3 Abert- A Bet; 4 Tampa-Tama; 5 Pearl-Peal; 7 Tioga-Toga; 8 Virgil-Vigil; 9 Amboy-A Boy; 10 Bath-Bat; (and) Potter and Otter; 11 Burns-Urns; 12 Hume-Hum; 13 Rome-Roe; (and) Fine-Fin; 14 Wheeling-Heeling; 15 Orange-Range; 16 Maine-Mine; 17 Cuba -Cub; 18 Ilion-Lion; 19 France-Franc; 20 Olean-Lean; 21 Spain-Pain; 22 Salem-Sale; 23 and 24 Volga-Olga; 25 Pike-Pie; 26 Islip-Slip; 27 Helena-Helen; 28 Nile-Nil; 29 Boone-Bone; 30 Ravena-Raven; 31 Cato-Cat; 32 Dover-Dove; 33 Texas-Teas; 34 Indiana-Indian; 35 Florida-Florid.

POLITICAL PUZZLE.

The political boss spent 1-6 of his age, plus 1-12 of his age plus 1-7 of his age plus 5 years before his son was born. Four years ago the son was 1-2 of his father's age, so today he must be 1-2 of his dad's age plus 4 years. Calling the father's age X, we have 1-6, 1-12 and 1-7 of X plus 5 years plus the years since the son's birth, which is represented by the son's age, 1-2 of X plus 4, total 75-84 of X plus 9 years as equal to the father's present age, X. This equation gives the value of X, the "boss's" age as 84 years, which is the correct answer.

PUZZLE SUMS.

Crow plus Heel minus Wheel plus Cod plus Bee plus file minus Beef equals —Crocodile.

RHYMING BIRDS.

The following words complete the rhyming lines: Eagle, Raven, Owl, Bobolink and Robin.

THE SEA SERPENT PUZZLE.

There were three totally blind serpents and three with both eyes sound.

SHAKESPEARE'S REBUS PUZZLE.

"All's Well that Ends Well."

CAT AND DOG PUZZLE.

In the Cat and Dog Puzzle, she goes "there and back" a distance of 162 feet in 54 jumps, but as the dog goes 5 feet at a bound, he has to make 17 leaps each way, which is the same as losing 8 feet. Dividing the cat's 54 jumps by 8 and multiplying by 5, shows that the dog would be beaten by 1 foot 3 inches.

PICTURE SUMS.

Tap plus Bee plus Fir minus Beef equals TAPIR.

A DOZEN LEGAL SEPARATIONS.

1 Pump-kin; 2 Rat-her; 3 Extortionate; 4 Per-verse; 5 End-ear; 6 Reinstate; 7 Pur-chase; 8 Aver-age; 9 Bargain; 10 Car-mine; 11 Hum-drum; 12 Cape-ring; 13 Bug-bear.

A BURIED PROVERB.

'Tis a Long Lane that has no turning."

A PUZZLE TRAGEDY OF THE HIGH SEAS.

NINEVEH — PARIS — PALMYRA — SPARTA — THEBES — NAPLES — ANDOVER — DOVER—ATHENS — VERONA and ROME.

DOUBLE DECAPITATIONS.

Trills, Rills, Ills; Trout, rout, Out; Skill, Kill, Ill; Spray, Pray, Ray; Flit, Lit, It.

SHAKESPEARE'S REBUS PUZZLE.

"TO BE OR NOT TO BE."

SKATER'S PUZZLE.

Jennie must have skated a mile in 4 minutes, to Maud's 10, being 2½ times as quick, and allowing her to win by six minutes.

PUZZLE SUM.

Shawl minus awl plus Ark equals Shark.

SIMPLE REPETITIONS.

The following words placed in the blank spaces complete the sense of the sentences in their given order:—1 Beaten-be at ten; 2-Notable-not able; 3-Often-of ten; 4-Tomato-To ma; 5-Parents-pa-rents; 6-Profit-able, Profitable; 7-Alter-native-alternative; 8-Hand-led-handled; 9-Abet-A-bet; 10-About-A bout; 11-Useless-Use less; 12-Beg one-Begone.

DOUBLE DECAPITATIONS.

1 Spear, 2 Blink, 3 Scold, 4 Wheel, 5 Shark, 6 Snail, 7 Still, 8 Stone.

CONDUCTOR'S PUZZLE.

According to the suburbanite's reply to the conductor, the son, daughter, wife and husband are collectively 81 times the age of the daughter, and since their combined ages equal the grandmother's 81 years, the baby is one and the boy five years of age.

FIND YOUR PORTRAIT IN THE MIRROR.

The mirror held in a slanting position away from the gas reveals the portrait of a donkey.

THE PISTOL MATCH.

The score of 96 containing three "doublets" was made by scoring twice in the 25 ring, twice in the 20 and twice in the 3.

The grey cow's soliloquy phonetically read may be translated as follows:

"I browze all day through lone wood or vale waiting for the sun's low rays to mark the hour the maid with her pail on her head leads the herd home by the gate."

KITTIE'S PUZZLE

Kittie had 7c and her brother Harry 5c.